

**COMMONWEALTH OF VIRGINIA**  
**Department of Environmental Quality**  
**West Central Regional Office**  
**STATEMENT OF LEGAL AND FACTUAL BASIS**

Bassett Furniture Industries, Inc., BFI Bassett  
(Formerly Bassett Table and Superior Lines)  
2611 Fairystone Park Highway, Bassett, Virginia  
Permit No. WCRO-30284

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Bassett Furniture Industries, Inc., BFI Bassett, has applied for a Title V Operating Permit renewal for its wood furniture manufacturing plant in Martinsville. The Department reviewed the application for permit renewal and has prepared a final Title V Operating Permit.

Engineer/Permit Contact: \_\_\_\_\_ Date: \_\_\_\_\_  
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Air Permit Manager: \_\_\_\_\_ Date: \_\_\_\_\_  
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## **FACILITY INFORMATION**

### Permittee

Bassett Furniture Industries, Inc.  
P.O. Box 626  
Bassett VA 24055

### Facility

Bassett Furniture Industries, Inc., BFI Bassett  
2611 Fairystone Park Highway  
Bassett VA 24055

County-Plant Identification Number: 51-089-0033  
Registration No.: 30284

First Renewal of Title V Operating Permit

## **SOURCE DESCRIPTION**

NAICS Code: 337122 – Non-upholstered Wood Household Furniture Manufacturing  
SIC Code 2511 – Wood Household Furniture Manufacturing

Bassett Furniture Industries, BFI Bassett (formerly Bassett Table Co. and Bassett Superior Lines) manufactures finished wood furniture and unfinished wood furniture parts covered by Standard Industrial Classification (SIC) Code 2511 (North American Industry Classification System (NAICS) Code 337122). Operations at the facility can be conducted twenty-four (24) hours per day, seven (7) days per week, fifty-two (52) weeks per year. Wood furniture and furniture parts are manufactured at the facility from rough-cut wood that is kiln-dried, milled, machined, sawed, and sanded. Furniture and parts are assembled, furniture is finished, and the furniture and parts are shipped.

### Source Description

This source consists of 2 plants, formerly Bassett Table Co. and Bassett Superior Lines, which are operated by Bassett Furniture Industries as two separate facilities. The two facilities belong to the same industrial group, are adjacent, and are under common ownership; therefore, they are considered as one stationary source. Due to financial conditions, Bassett Table Co. plant was temporarily shut down, however, this facility is now operating after having rearranged some finishing equipment. The entire facility has recently changed its name to Bassett Furniture Industries, BFI Bassett.

Portions of the source are covered by a state New Source Review permit while other portions of the source have never been issued a permit. The following woodworking dust collection systems are included in a state New Source Review permit dated September 2, 1999:

- Table Plant - 2 systems (T-CDBF2 and 6)
- Superior Lines - 3 systems (S-CDBF1, 10 and 12).

The 2 wood/coal-fired boilers (each 75 MMBtu/hr), 8 wood drying kilns, 16 woodworking dust collection systems, 42 spray booths, 6 ovens, 1 washoff tank and 1 dip tank are existing and are not covered by a state New Source Review permit.

Rough cut green hard wood is brought to the facility where it is dried in kilns. Primarily hardwoods are dried in the kilns, but they have the capability to also dry softwoods. Steam for the kilns is supplied by the boilers. Furniture components are made from the dry wood by milling, machining, sawing, and sanding. All of the wood dust is collected by the facility's dust collection systems. Fabric filters control all emissions from the dust collection systems. The wood dust is used as fuel in the boilers and is stored in a silo. Six of the dust collection systems are permitted, as mentioned above.

The furniture components that are assembled use various adhesives, such as hot melt and white glue (similar to Elmer's), which contain little or no VOCs. Some of the VOC emissions from the gluing operations are emitted from spray booth stacks, while other emissions are fugitive in nature. The furniture assembly adhesive VOC emissions are not covered by a state New Source Review permit.

Furniture finishing for the Table Plant (T-FN1) is done in a series of 20 spray booths, 3 drying ovens and one washoff tank. These are existing spray booths and no particulate overspray control is in use.

Furniture finishing for the Superior Plant (S-FN1) is done in a series of 22 spray booths, 3 drying ovens and one dip tank. Two of the spray booths (B8 and B13) have baffle particulate overspray control in use and the other booths are uncontrolled.

There is no VOC emission control in place for any of the finishing operations.

Process and space heat for the facility is provided by the two facility boilers. Both the 75.0 MMBtu/hr Union Iron Works boiler and the 75.0 MMBtu/hr Keeler boiler burn wood as fuel, with coal as a backup fuel. Particulate emissions from the Union and Keeler boilers are controlled by respective multicyclones. The boilers are not covered by a state New Source Review permit; however EPA issued a Consent Decree on October 15, 1999 outlining a series of compliance requirements for the source's boilers. These included the establishment of an Environmental Management Plan, boiler instrumentation maintenance, boiler operator training, and boiler

maintenance recordkeeping. As part of the Decree, Bassett implemented a Supplemental Environmental Project (SEP) to install 3 baghouses to replace 4 cyclones at the former Bassett Table plant and to install 1 baghouse to control emissions from wood grinding and as an after-filter to a cyclone at the former Bassett Superior Lines plant. This Consent Decree is referenced in several conditions pertaining to compliance issues with the boilers.

The wood furniture MACT (Subpart JJ) applies to the furniture finishing portion of this facility since actual HAP emissions exceed the 10/25 tons per year threshold. There are no emission limits for HAPs from the facility.

The boiler MACT (Subpart DDDDD) applies to the 2 wood/coal-fired boilers. Bassett submitted a health-based alternative compliance eligibility demonstration to DEQ and EPA on July 28, 2006. A final determination on this submittal is pending.

The Plywood and Composite Wood Products (PCWP) MACT (Subpart DDDD) is applicable to the 8 wood drying kilns. The only requirement for facilities with kilns is the initial notification. The PCWP MACT also applies to gluing operations at the facility. The facility is not subject to any emission limits as a result of this MACT; however initial notification requirements do apply.

The original Title V operating permit was issued on February 1, 2002, effective March 1, 2002. It will be replaced by this first renewed Title V permit. The applicant submitted a timely and complete Title V permit application for a renewal, which extends, if needed, the terms of the Title V permit until renewal.

## **COMPLIANCE STATUS**

The facility was last inspected on February 16, 2006. It was found to be in compliance.

## EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

Emission units at this facility include:

Emission Unit ID	Emission Unit Description	Capacity/Size	Pollution Control Device (PCD)	PCD ID	Applicable Permit Date
<b>Fuel Burning Equipment</b> Subject to 9 VAC 5 Chapter 40 (Existing)					
BL1	Union Iron Works wood/coal fired boiler -- #6346	75 MMBtu/hr	Multicyclone	CDMC1	N/A
BL2	Keeler wood/coal fired boiler -- SN:14629	75 MMBtu/hr	Multicyclone	CDMC2	N/A
<b>Woodworking Equipment</b> Subject to 9 VAC 5 Chapter 40 (Existing)					
T-WW	Woodworking dust collection systems at former Bassett Table	Various	7 Fabric filters	T-CDBF 1, 3, 4, 5, 7, 8 and 9	N/A
S-WW	Woodworking dust collection systems at former Bassett Superior Lines	Various	9 Fabric filters	S-CDBF 2, 3, 4, 5, 6, 7, 8, 9 and 11	N/A
<b>Woodworking Equipment</b> Subject to 9 VAC 5 Chapter 50 (New or Modified)					
T-WW	Woodworking dust collection systems at former Bassett Table	Various	2 Fabric filters	T-CDBF 2 and 6	9/2/99
S-WW	Woodworking dust collection systems at former Bassett Superior Lines	Various	3 Fabric filters	S-CDBF 1, 10 and 12	9/2/99
<b>Furniture Finishing Equipment</b> Subject to 9 VAC 5 Chapter 40 (Existing)					
T-FN1	Finishing operations at former Bassett Table comprised of 20 spray booths, 3 ovens and 1 washoff tank	Various	none	N/A	N/A
S-FN1	Finishing operations at former Bassett Superior Lines comprised of 22 spray booths, 3 ovens and 1 dip tank	Various	baffle particulate filters on SB8 and SB13		N/A

### **EMISSIONS INVENTORY – Actual Emissions**

Actual plant emissions for calendar year 2005 as listed in the DEQ CEDS annual emission inventory system are summarized below:

<b>2005 Actual Pollutant Emissions in Tons per Year</b>						
	CO	VOC	SO <sub>2</sub>	PM/PM <sub>10</sub>	NO <sub>2</sub>	HAPs/VHAPs
TOTAL	47.59	324.90	3.55	25.37 / 23.78	39.15	41.53*

\* ethylbenzene = 3.55 tons  
toluene = 21.66 tons  
xylene = 15.43 tons  
Glycol Ethers = 0.50 tons  
Vinyl Acetate = 0.39 tons

### **NSPS, MACT, and CAM APPLICABILITY**

NSPS - There are no applicable NSPS for this facility.

Wood Furniture MACT (Subpart JJ) – applies to the finishing operations at the facility and was incorporated into the original March 1, 2002 Title V permit. The facility uses the compliant coating option to meet the applicable MACT JJ requirements and tracks coating consumption via REGMET.

Boiler MACT (Subpart DDDDD) - will apply to the plant's two boilers (BL1 and BL2) starting on this MACT's compliance date of September 13, 2007. Each boiler is rated at 75 MMBtu/hr and burns wood or coal. Bassett submitted a health-based alternative compliance eligibility demonstration to EPA and DEQ on July 28, 2006.

Plywood and Composite Wood Products (PCWP) MACT (Subpart DDDD) - will apply to the plant's 8 lumber drying kilns (initial reporting only) and to certain gluing operations. As published in the Federal Register on February 16, 2006, the compliance date for this MACT has been "pushed back" to October 1, 2008.

CAM (Compliance Assurance Monitoring) - will *not* apply to any operations at the facility.

CAM could potentially apply to the baghouses controlling woodworking operations. However, CAM does not apply to each woodworking baghouse because the potential to emit is less than 100 tons/yr of uncontrolled PM<sub>10</sub> emissions to any control device (baghouse).

Bassett has requested a federally enforceable annual fuel consumption limit to avoid CAM for the boilers. Without a fuel limit, either boiler has the potential to deliver more than 100 tons per year of PM and PM<sub>10</sub> to the multicyclones.

### **CHANGES TO PLANT**

Finishing Lines S-FN1 and T-FN1 have been consolidated from 3 total lines to just two. Five paint spray booths, print lines, roll coaters, roll print machines and the 2 roll print machines have been removed.

### **CHANGES TO PERMIT**

This Title 5 permit has not been modified since it was originally issued on February 1, 2002. This first renewal will incorporate the following changes:

- update Finishing Lines S-FN1 and T-FN1, removing a total of 4 spray booths, 2 rollcoaters, 3 print lines, 1 air flash over, 2 roll print machines and 3 IR ovens
- include annual fuel consumption limits of 6,758 tpy coal and 17,970 tpy wood for each boiler (to limit uncontrolled PM<sub>10</sub> emissions to the boilers' multicyclones and avoid CAM requirements)
- include a sulfur limit of 1.8% for coal used at the facility to assure compliance with the hourly SO<sub>2</sub> emission limit (this limit was inadvertently omitted from the original T5 permit) - note that the permittee has maintained the required records of coal shipments including coal sulfur content and has been in compliance with the 1.8%S limitation
- decrease visible emission observation requirement for fabric filters and spray booth exhausts from once per week to once per month -- this facility has had no visible emission problems during this entire 5-year permit term
- incorporate references for compliance with the boiler MACT (Subpart 5D) for both boilers
- incorporate references for the PCWP MACT (Subpart 4D) for affected processes (8 dry kilns and assorted gluing operations)

### **REPORTING**

The permittee shall submit reports as follows:

- Annual Title V Compliance Certifications  
to DEQ and EPA (Region III) by March 1 for the previous calendar year;
- Semi-annual Title V Reports  
to DEQ by March 1 and September 1 of each year (time periods to be addressed are January 1 to June 30 and July 1 to December 31);

- Semi-annual Wood Furniture Manufacturing MACT (40 CFR 63 Subpart JJ) Reports to DEQ and EPA (Region III) by March 1 and September 1 of each year (time periods to be addressed are January 1 to June 30 and July 1 to December 31); and
- Malfunction or Deviation reports to DEQ within 4 daytime business hours after discovery of any malfunctions and any deviations from permit requirements that may cause excess emissions for more than one hour.

## **GENERAL CONDITIONS**

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110 that apply to all facilities operating under a Federal operating permit. Selected requirements are noted below:

### **B. Permit Expiration**

This condition refers to the five year permit term, to the permittee's responsibility to apply for renewal, to the State Air Pollution Control Board taking action on a permit application, and to the prior terms and conditions remaining in effect until the renewal is issued or denied. The authority to take action on permit application(s) has been delegated to the Regions as allowed by §2.1-20.01:2 and §10.1-1185 of the *Code of Virginia*, and the "Department of Environmental Quality Agency Policy Statement No. 3-2001".

### **J. Permit Modification**

This condition cites the following sections from the Virginia Regulations for the Control and Abatement of Air Pollution:

- 9 VAC 5-80-50 -- Applicability, Federal Operating Permit For Stationary Sources
- 9 VAC 5-80-190 -- Changes to Permits.
- 9 VAC 5-80-260 -- Enforcement.
- 9 VAC 5-80-1100 -- Applicability, Permits For New and Modified Stationary Sources
- 9 VAC 5-80-1790 -- Applicability, Permits For Major Stationary Sources and Modifications Located in Prevention of Significant Deterioration Areas

### **U. Malfunction as an Affirmative Defense**

The Virginia Regulations for the Control and Abatement of Air Pollution contain two reporting requirements for malfunctions that coincide. Reporting requirements are listed in sections 9 VAC 5-80-250 and 9 VAC 5-20-180. Malfunction requirements are listed in General Conditions U and F.

This condition cites the following sections from the regulations:

- 9 VAC 5-20-180 Facility and Control Equipment Maintenance or Malfunction
- 9 VAC 5-80-110 Permit Content



## **Y. Asbestos Requirements**

The Virginia Department of Labor and Industry under Section 40.1-51.20 of the Code of Virginia also holds authority to enforce 40 CFR 61 Subpart M, National Emission Standards for Asbestos.

This general condition contains citations from the Code of Federal Regulations as follows:

- 40 CFR 61.145, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to demolition and renovation.
- 40 CFR 61.148, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to insulating materials.
- 40 CFR 61.150, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to waste disposal.

## **STATE ONLY APPLICABLE REQUIREMENTS**

This permit contains no State Only Applicable Requirements

## **FUTURE APPLICABLE REQUIREMENTS**

- The Wood Furniture Manufacturing MACT (JJ) is already applicable to the finishing operations at the plant.
- CAM will not apply to the boilers since coal and wood fuel throughput limits will be implemented to limit potential PM<sub>10</sub> emissions to either multicyclones to  $\leq 100$  tpy. No other emission control devices (fabric filters) have the potential to receive 100 tons per year of emissions therefore CAM is not applicable.
- The Plywood and Composite Wood Products MACT (DDDD) applies to the lumber drying kilns and gluing operations however the requirements are for initial notification only.

## **INAPPLICABLE REQUIREMENTS**

The startup, shut down, and malfunction opacity exclusion listed in 9 VAC 5-40-20 A 3 (for pre-1972 existing emission units) cannot be included in any Title V permit because this portion of the regulation is not part of the federally approved state implementation plan (SIP). The opacity standard applies to existing sources at all times including startup, shutdown, and malfunction. Opacity exceedances during malfunction can be affirmatively defended provided all requirements of the affirmative defense section of this permit are met. Opacity exceedances during startup and shut down will be reviewed with enforcement discretion using the requirements of 9 VAC 5-40-20 E, which state that "At all times, including periods of startup, shutdown, soot blowing and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility

including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions." Since this is a new plant as of 1998, the existing source opacity exclusion is not applicable for any equipment at this facility.

In contrast, the similar startup, shut down, and malfunction opacity exclusion listed in 9 VAC 5-50-20 A 4, for emissions units that are new or modified since 1972, is SIP-approved and therefore applies to all emissions units at this facility.

### **COMPLIANCE PLAN**

This facility is not subject to a compliance plan.

### **INSIGNIFICANT EMISSION UNITS**

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Insignificant emission units include the following:

Emission Unit No.	Emission Unit Description	Citation 9VAC	Pollutant(s) Emitted	Rated Capacity
S-ST 3 and 4	flat lacquer storage tank	5-80-720B	VOC	2,600 gallons each
S-ST 5 thru 8	sealer or gloss lacquer storage tank	5-80-720B	VOC	3,190 gallons each
S-ST 9 and 10	thinner storage tanks	5-80-720B	VOC	3,290 gallons each
S-ST 11	(6) finishing day tanks	5-80-720B	VOC	175 gallons each
DK <sup>1</sup>	(8) drying kilns	5-80-720B	VOC	100,000 bd.ft. each
S-GL1 and 2, T-GL1 <sup>2</sup>	furniture gluing operations	5-80-720B	VOC	<5 tpy

<sup>1</sup> PCWP MACT applies to all wood drying kilns, initial notification only

<sup>2</sup> PCWP MACT applies to gluing operations however no emission limits apply; initial notification only

### **CONFIDENTIAL INFORMATION**

The permittee did not submit a request for confidentiality. All portions of the Title V application are suitable for public review.

### **PUBLIC PARTICIPATION**

The draft/proposed permit was advertised for public notice in the *Martinsville Bulletin* on January 23, 2007. The required 30-day public notice period closed on February 22, 2007 with no comments received.

The EPA 45 day concurrent review period ran from January 23, 2006 through March 9, 2007. No comments were received from EPA concerning this permit action. This permit was advertised for *concurrent review*.